

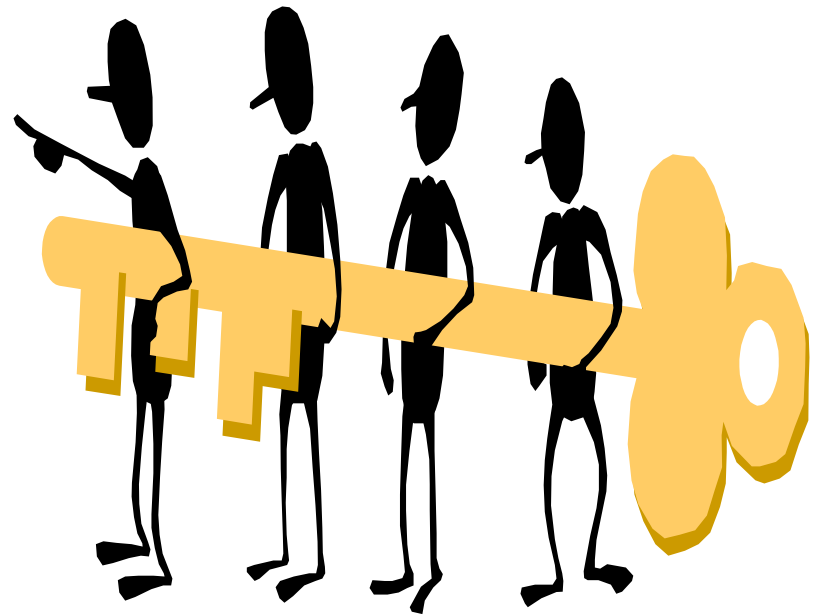
# Building a Portfolio on Sound Investment Concepts

CA Debt & Investment Advisory Commission  
November 2003



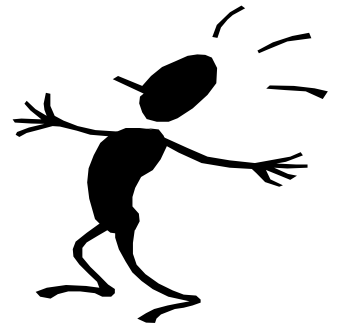
## What this Class is Designed to do:

- To educate you about the basics of investing public funds in California. This information will enable you to make better financial decisions for your jurisdiction.



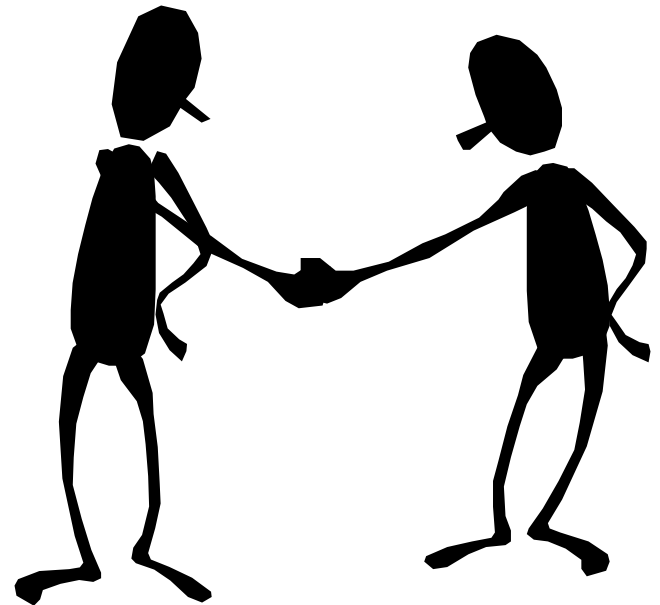
# Overview

- Discuss different types of permitted investments...
- Explanations of different types of risk associated with these investments...
- Structuring a simple portfolio...



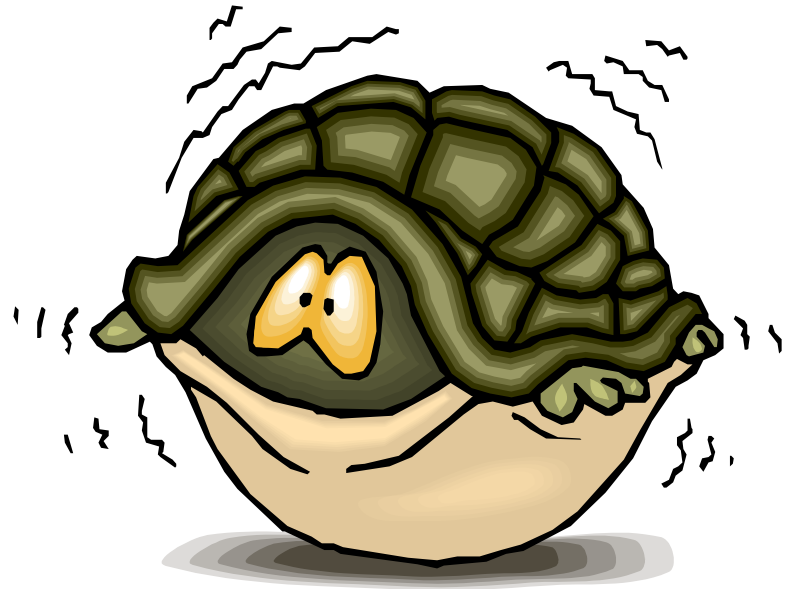
# What is a Fixed Income Investment?

- A **fixed income investment** is a loan to a corporation, municipality, or government agency. When you purchase this type of investment, you are in fact *lending* money to that entity which they will pay back at a set interest rate. It is fixed because the coupon is set at one rate at issuance. Yield changes, coupons don't.



# It's All About Managing Risk

- Risk
  - Safety
  - Liquidity
  - Diversification
  - Return
- 
- The Risk versus Return Trade-off

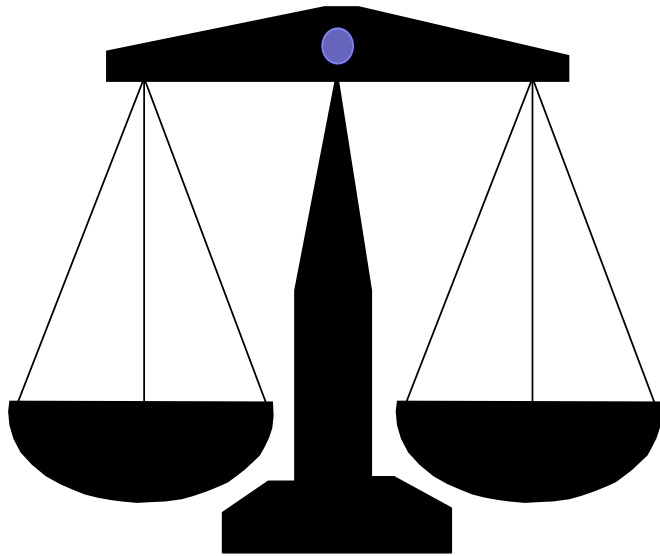


# Risk with Fixed Income Investments



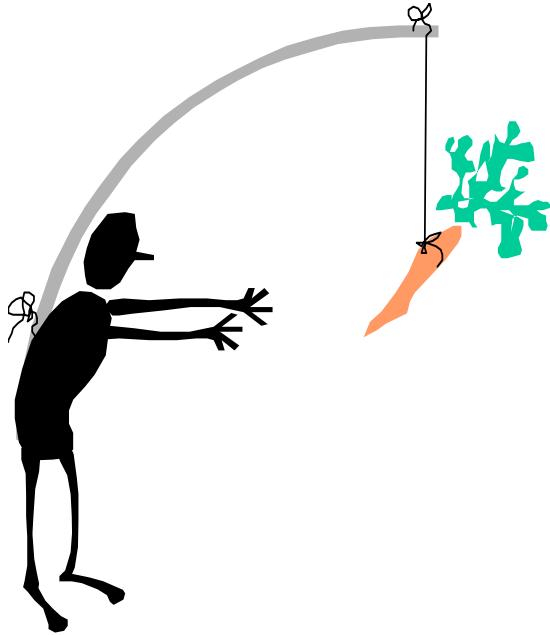
- **Credit Risk** -  
the ability of the ***bond issuer*** to repay the ***bondholders...***  
if the issuer has bad credit, the greater the risk which demands higher yield.

# Risk with Fixed Income Investments



- **Interest Rate Risk**
  - the risk of change in interest rates...
    - the longer the term of the bond, the greater the exposure to interest rate risk... the more things can change

# Risk with Fixed Income Investments



- **Inflation Risk** -  
erodes your purchasing power because inflation reduces what your money can buy.  
If your investments earn less than inflation, then you are exposed to *inflation risk*.





- Risk will rise with:
  - duration, embedded options, lower credit
- Liquidity will drop with:
  - lower credit, duration
- Upward rate changes can:
  - eliminate liquidity, force loss of principal

# Authorized Investments



- **TREASURIES**

## Reward

- High Credit Quality
- Liquidity
- Regular Issuances
- Regular Maturities
- Treasury Direct

## Risk

- Low Yields
- Bad-End Dates
- Interest Rate Risk

# Authorized Investments



- **MID TERM NOTES & BONDS**

## Reward

- High Credit Quality (A or above)
- Faith & Credit of Corporation
- Regular Maturities

## Risk

- Market Risk
- Credit Risk
- Interest Rate Risk

# Authorized Investments

- **AGENCIES**

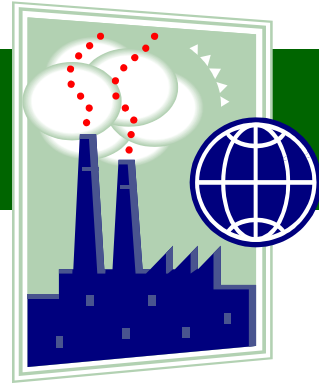
## Reward

- Implied US Credit
- No Bad End Dates
- Range of Maturities
- Spread to Treasuries

## Risk

- Limited Credit
- Limited Liquidity
- Interest Rate Risk

# Authorized Investments



- **COMMERCIAL PAPER & BAs**

## Reward

- Limited to A1/P1/F1 and above
- Spread to Agencies
- Flexibility

## Risk

- Limited Credit
- DTC
- Interest Rate Risk

# Authorized Investments



- Certificates of Deposit/  
Negotiable CDs

## Reward

- *Pledged* Collateral
- Ease
- Collateralized

## Risk

- Penalty on Withdrawal
- Collateral
- Collateral Monitor Risk
- Illiquidity
- 360-365 Day Count
- FDIC Assurance ?

# Authorized Investments



- **POOLS**

## Reward

- Money Market Rates
- Short term
- Flexibility and Ease
- Access

## Risk

- Money Market Rates
- Limited Oversight
- Overdependence
- Interest Rate Risk

# Authorized Investments

- **FUNDS**

## Reward

- Ease
- SEC Oversight
- MMMF Money Rates
- MF Improved Yields

## Risk

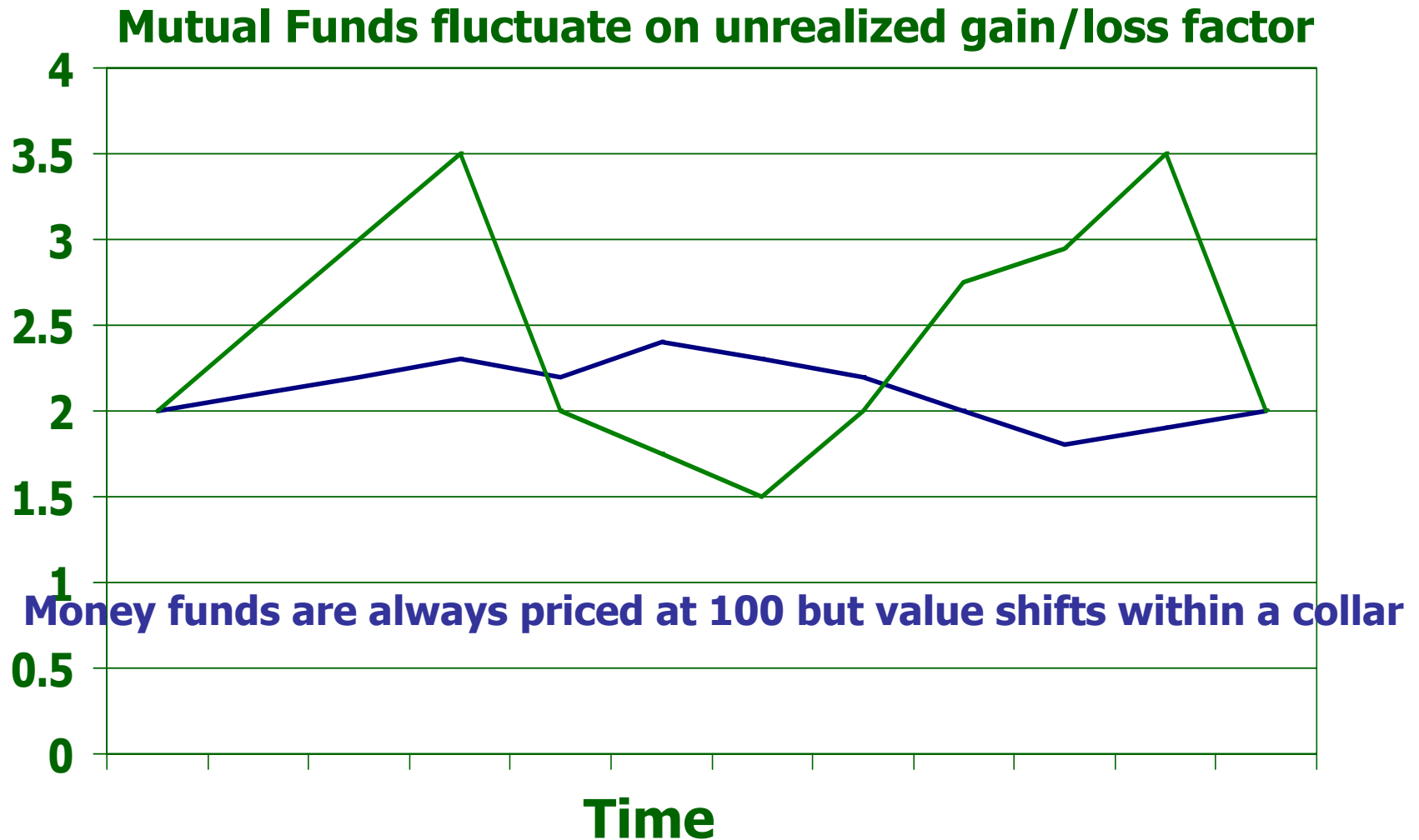
- Hidden Conditions
- Potential Principal Loss
- Interest Rate Risk



# What is a Money Fund

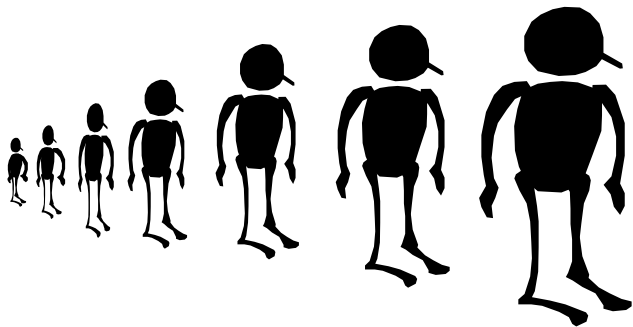
- (Aka constant dollar fund, MMMF, 2a-7)
- Strives to maintain a \$1 share value, 90-day WAM
- Used for liquidity (dollar in - dollar out)
- Often used for sweeps and pool structures
- Yields stay near Fed Funds rate

# Constant Dollar vs Mutual Funds



# What is a Mutual Fund?

fund  
manager



investors

- A Mutual Fund is a portfolio of securities (stocks or bonds defined by policy/prospectus) managed by professionals, who are known as *fund managers*.
- One mutual fund may consist of thousands of investors.
- In California investment is limited to bond mutual funds.
- Designed for yield which raises risks of principal loss.

# How Mutual Funds Work

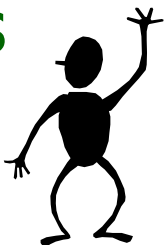
- Mutual Fund companies determine Net Asset Value (NAV) for the “shares” of the fund.
- You the investor buys into the fund at NAV.
- The fund managers manage the fund, selling and buying securities within the fund.
- All transactions for the day are processed at the close of business, when the NAV is determined.
- The price of the NAV fluctuates based on unrealized gain/loss of portfolio, market conditions and fund management.

# What is a Stable Value Fund?

- A Stable Value Fund invests in high-grade investment contracts (GICs) issued by insurance companies. Credit concerns.
- It is a fixed investment seeking to provide the highest possible yield from stable value investments and maintenance of cash reserves.

# A Stable Value Fund is good if...

- You are extremely sensitive to market risk, and other risks associated with bonds.
- You are an investor who seeks to preserve principal regardless of a lower rate of return.
- Inflation has been fairly low.
- You are looking to add a stable value fund as a supplement to your portfolio.



# The Trade-Offs

- **POOLS/FUNDS**

- liquidity
- liability coverage
- principal loss on funds
- lag rates

- **SECURITIES**

- yield
- liability coverage
- unrealized loss if mis-matched
- staying with rates

# Authorized Investments

- **REPO & REVERSE**

- *Owned* Collateral
- Flexibility
- Overnight Use
- Incremental Income
- DVP

- **SECURITIES LENDING**

- *Pledged* Collateral
- 60-40% Split  
(LA has a 80-20%)
- Collateral Control
- DVP ?



# Public Investing Is:

- Cash flow dependent
- Horizon investing
- Cash Activation
- Utilizing a liquidity alternative
- Evaluating & using all alternatives
- Laddered maturities (one approach only)
- Core investing

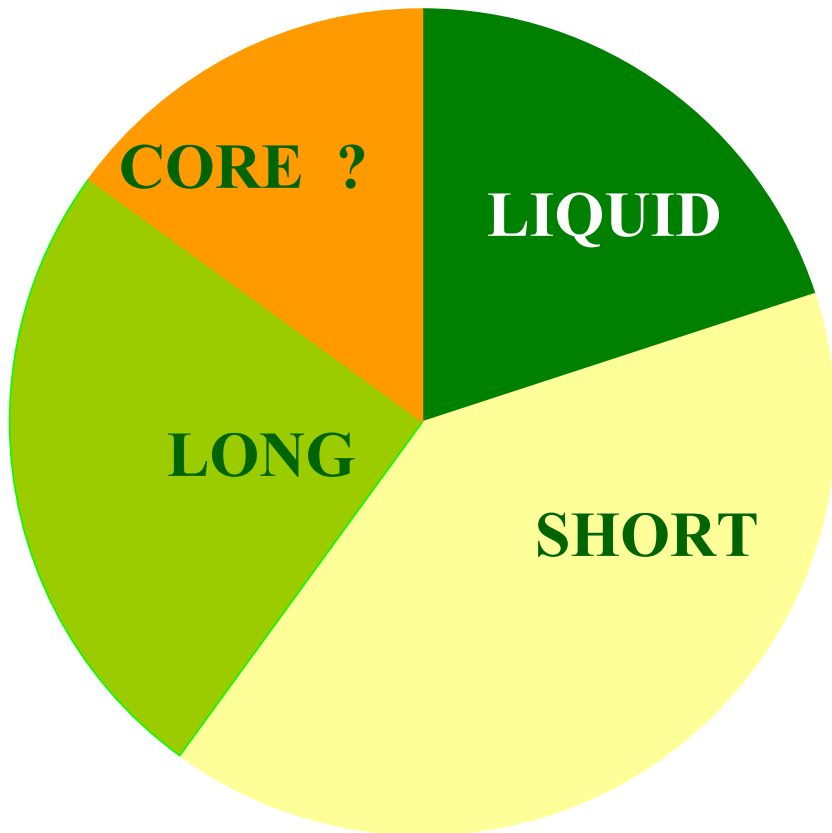


# Limiting the Risks

- Diversification
  - by security, maturity, and broker
- Planning to Match Needs = Cash-Flow
- Documentation
- Market Monitoring
- Credit Quality
- Periodic Credit Review
- Liquidity from Money Funds/Pools
- Risk Benchmarks



# Basic Portfolio Structure

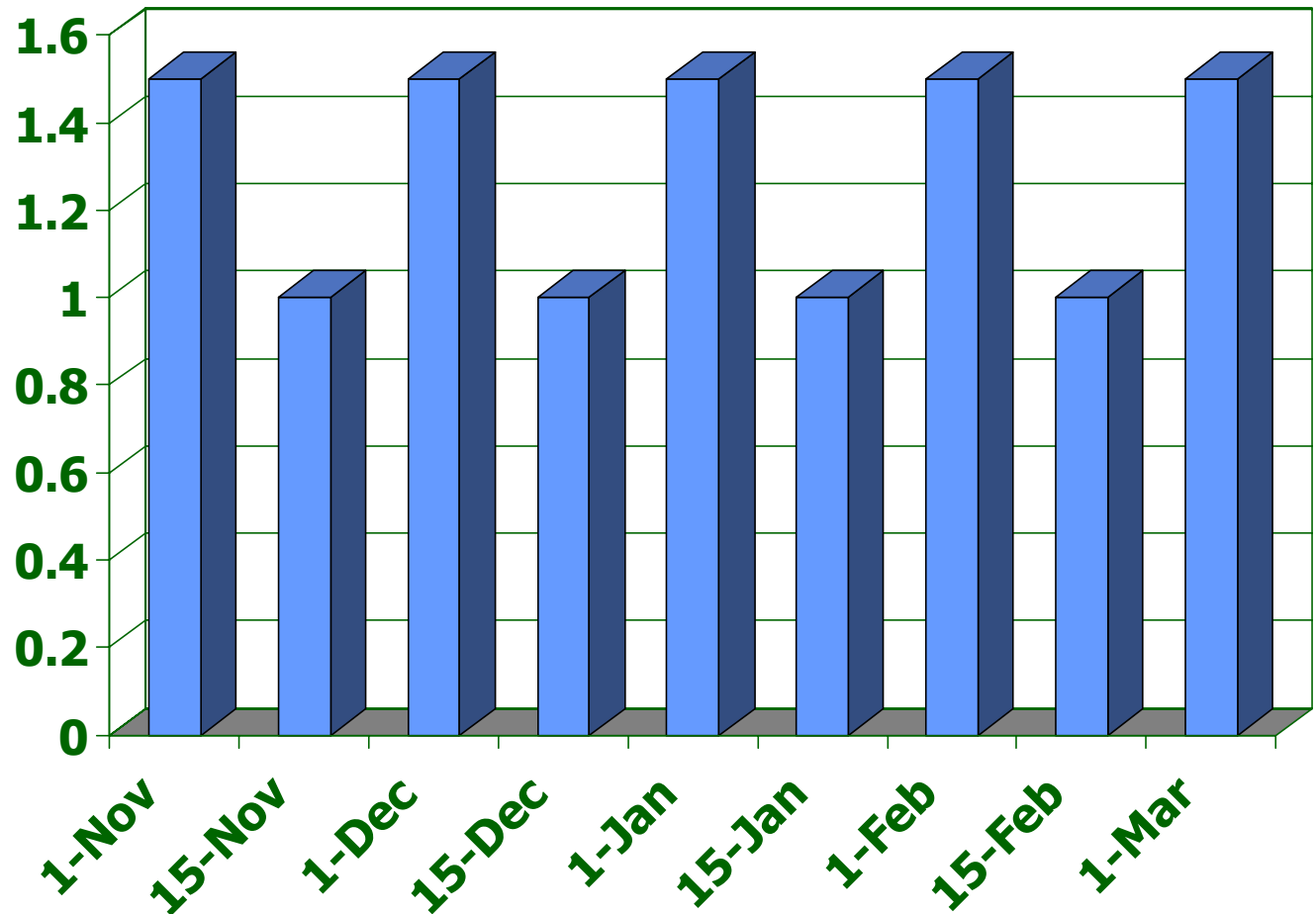


- ***Cash flow Basis***
- All entities have needs for liquid money
- Securities create longer portions
- Securities create opportunity
- Length is a relative measure on size/risk

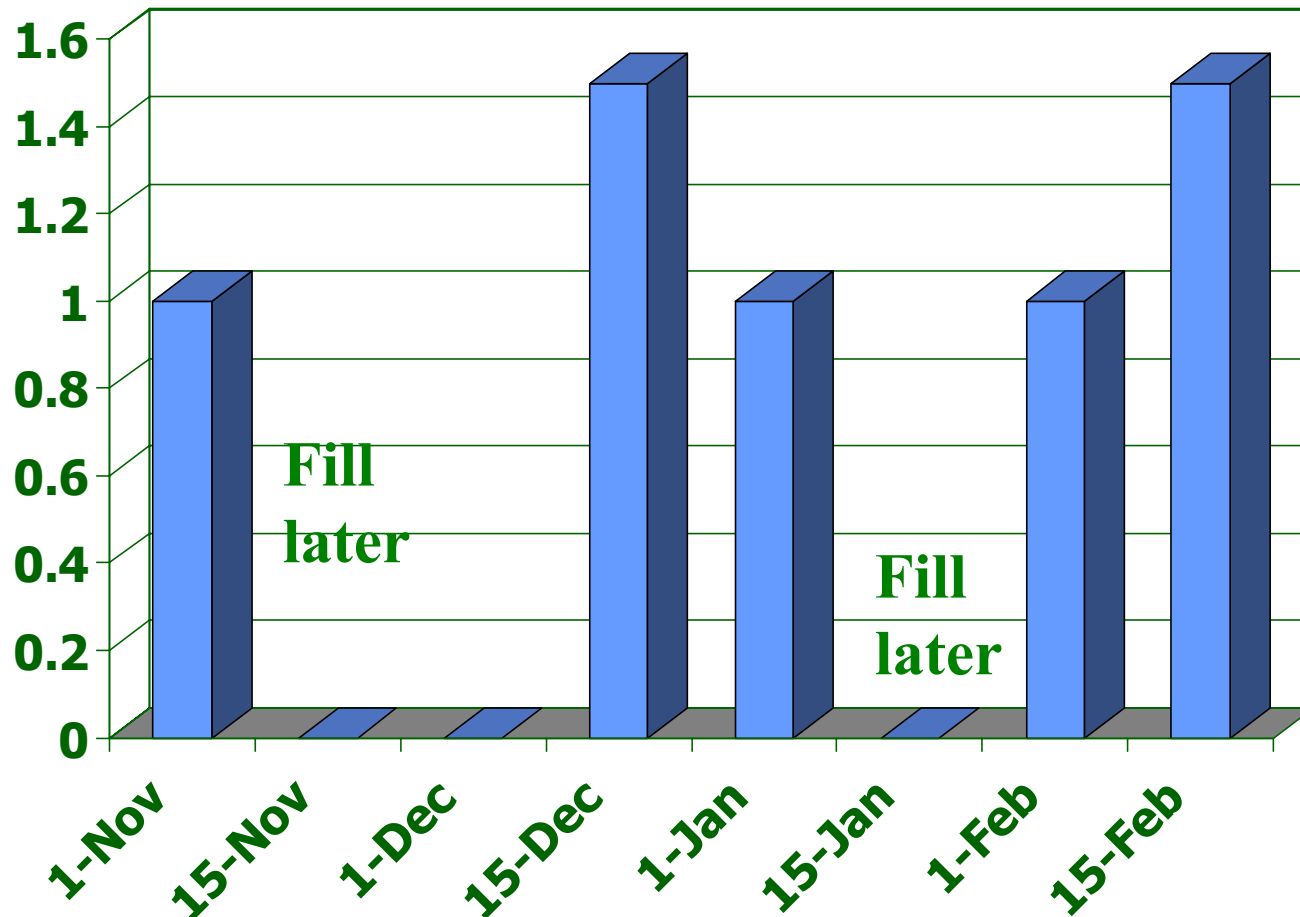
# The Ladder Strategy

Advantages?

Disadvantages?



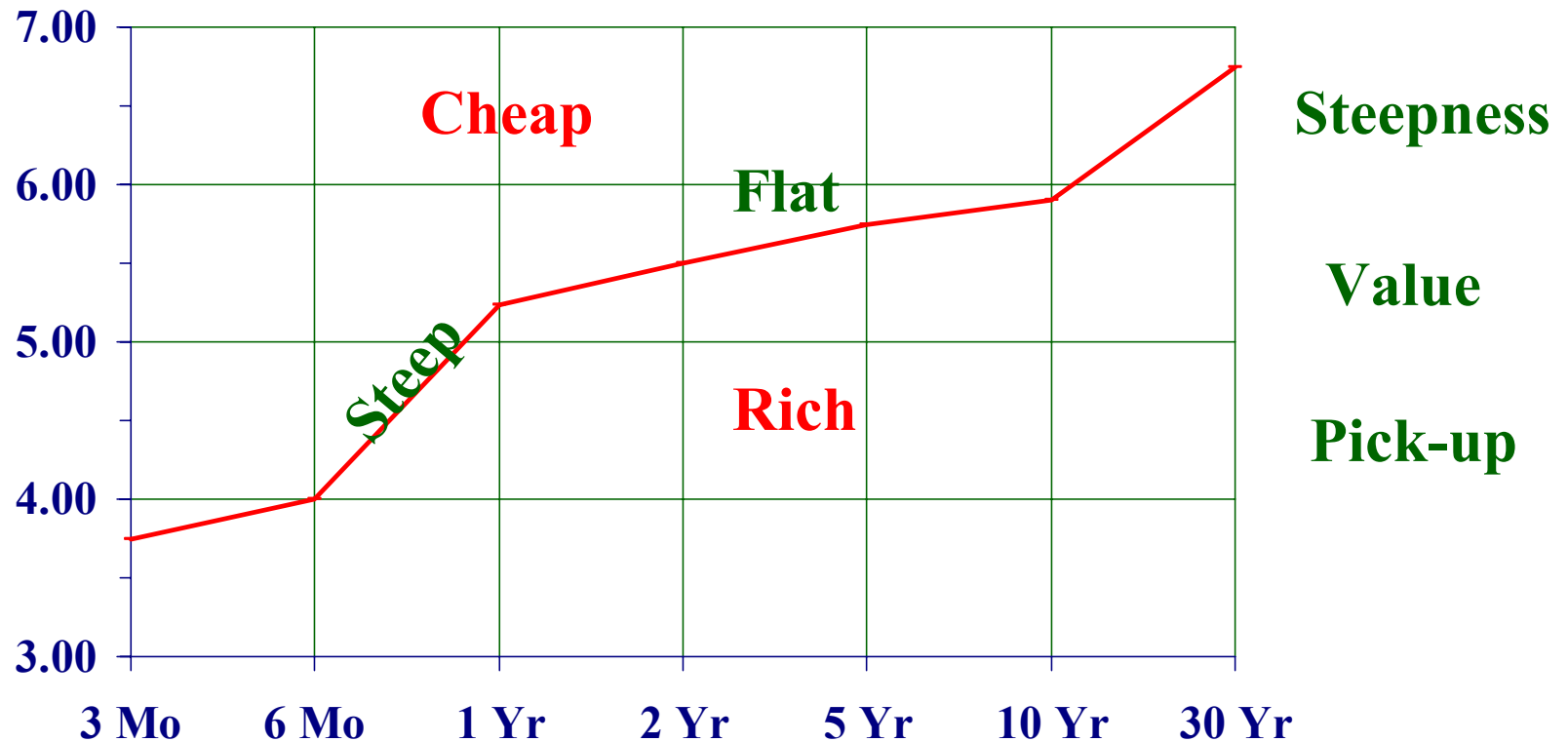
# Market Timed Ladder Adds Yield



**Market yields determine which liabilities to fund**

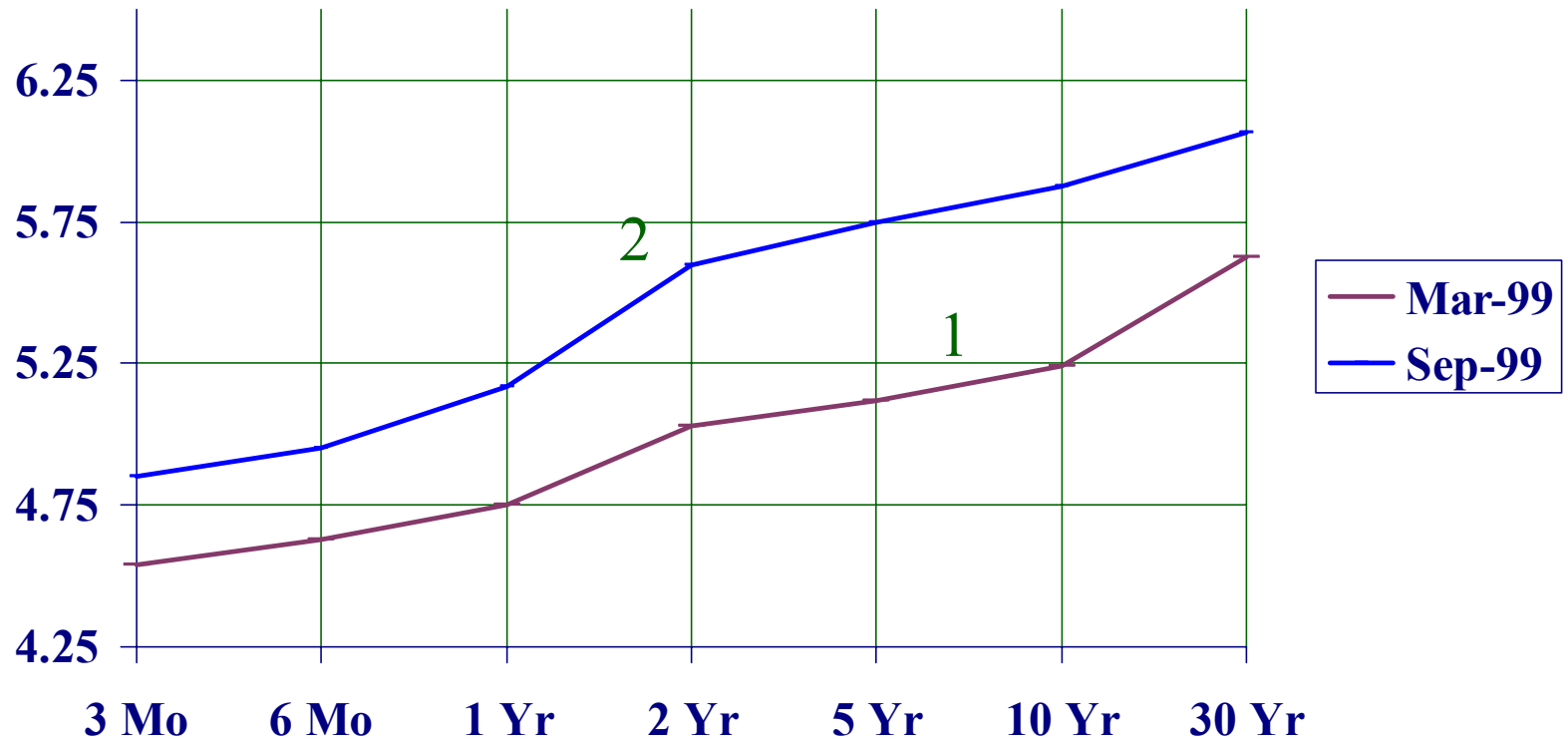
# Yield Curve Nuances

**LISTEN TO THE CURRENT YIELD CURVE**



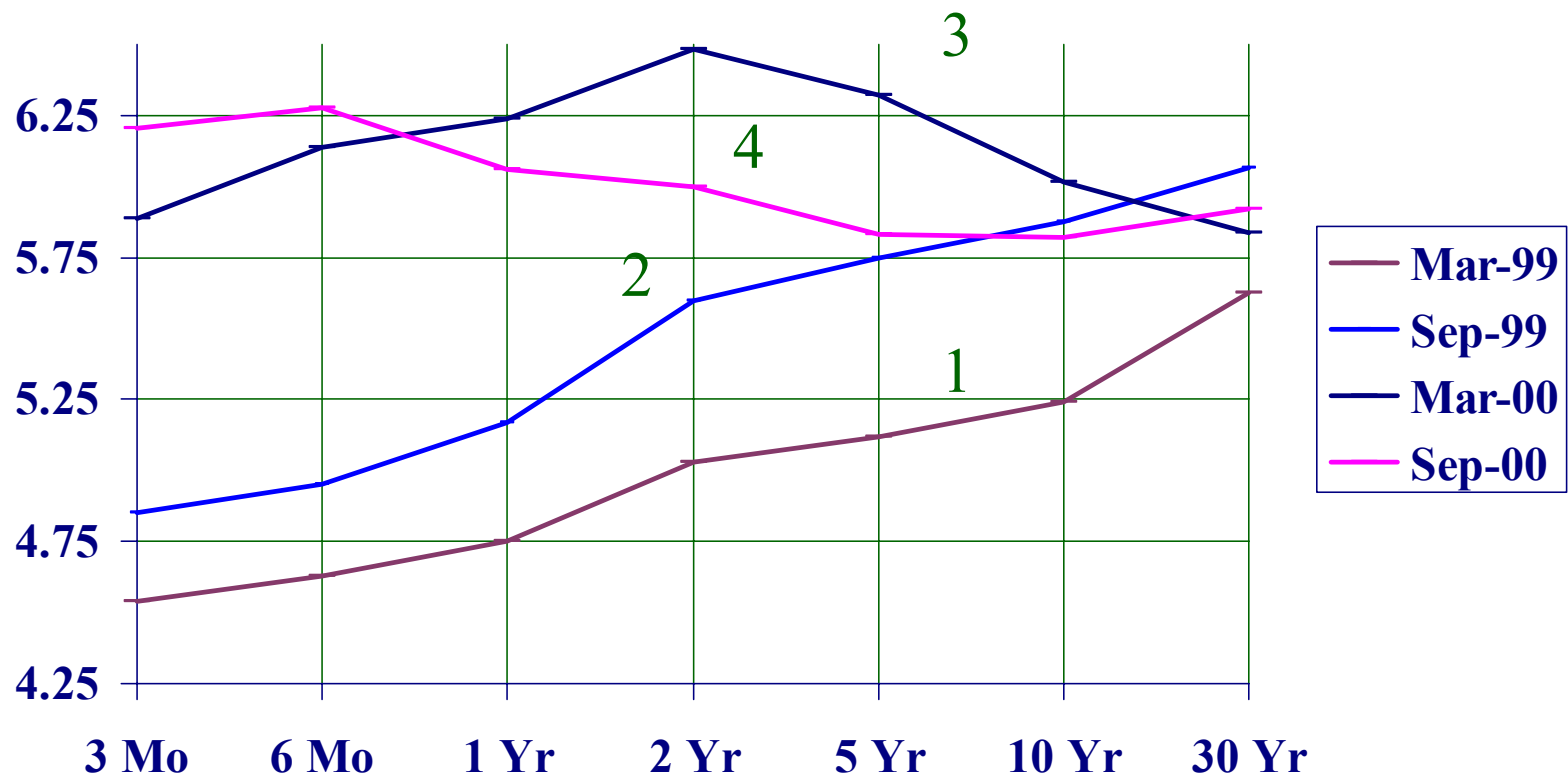
# Actual Yield Curve Changes

Curve indicates slowly rising rates with pick-up (2)



# Actual Yield Curve Changes

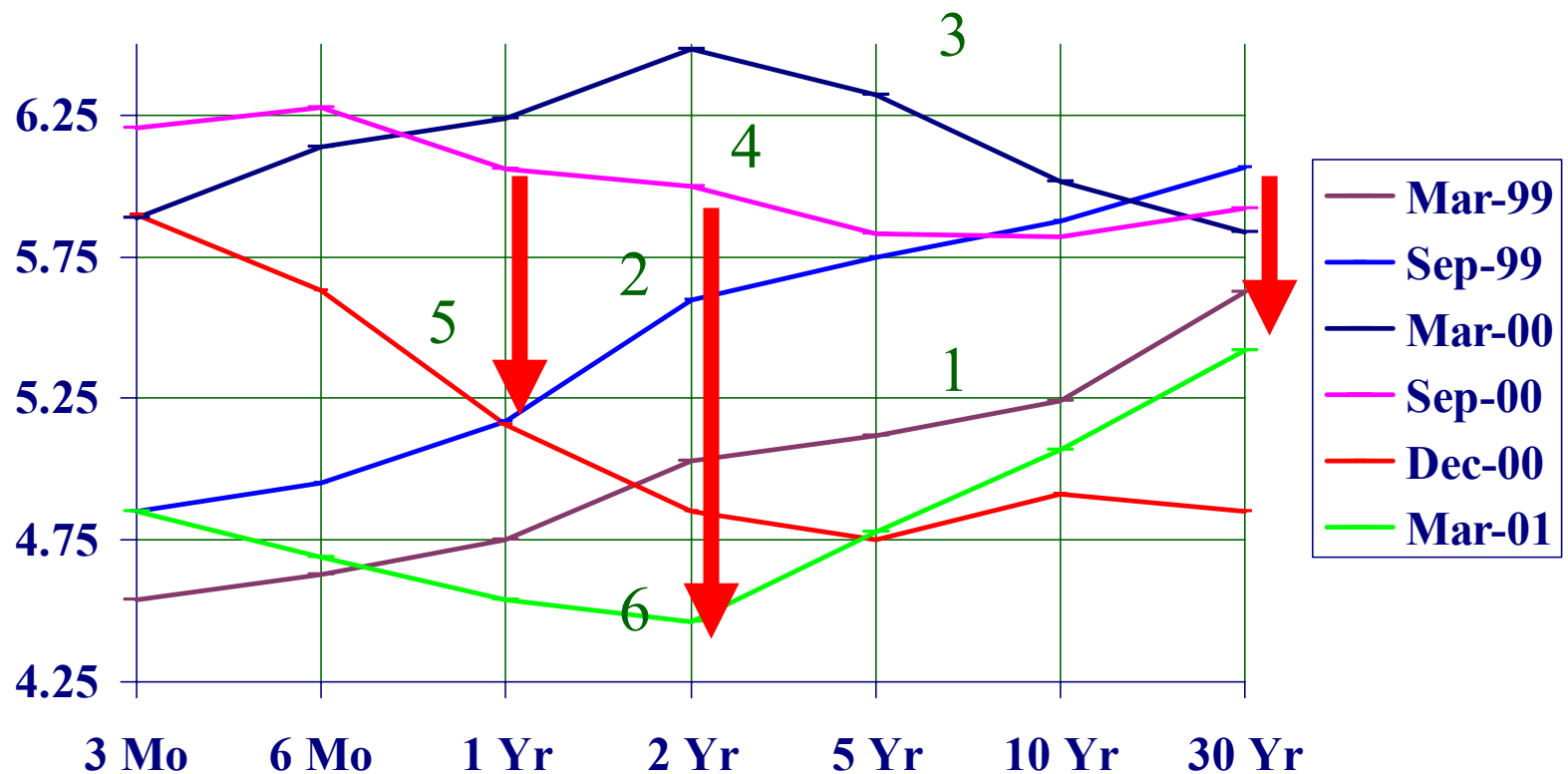
Rates rose but now indicate a sharp drop





# Actual Yield Curve Changes

Rates dropped precipitously across the curve



# FOCUS



- Focus on safety and “needed” liquidity before rate of return
- Use securities to add return
- Match to liabilities
  - market driven choices
- Understand your current curve

# *Market Rate of Return* comes from Good Planning and Execution



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